

- Coriolis acceleration

$$\vec{a}_p = \vec{a}_o + \frac{^b d^2}{dt^2} \vec{r} + 2\vec{\omega}_{ib} \times \frac{^b d}{dt} \vec{r} + \vec{\alpha}_{ib} \times \vec{r} + \vec{\omega}_{ib} \times (\vec{\omega}_{ib} \times \vec{r}) \quad (1)$$

- Transversal acceleration

- Centripetal acceleration